

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.-27. (canceled).

28. (currently amended): A method of fabricating a hologram-recorded medium from a photopolymer capable of recording a volume hologram, the method comprising:

stacking the photopolymer material on a dichroic filter comprising a multilayer interference film, said dichroic filter being stacked on a first reflection type relief hologram, and

striking reconstructing illumination light of given wavelength on said first reflection type relief hologram through said photopolymer and said dichroic filter, so that first interference fringes produced by interference of light diffracted from said first reflection type relief hologram and the incident light are recorded in said photopolymer,

replacing said first reflection type relief hologram with a second reflection type relief hologram and striking reconstructing illumination light of the given wavelength on said second reflection type relief hologram through said photopolymer and said dichroic filter, so that second interference fringes produced by interference of light diffracted from said second reflection type relief hologram and the incident light are recorded in said photopolymer,

wherein each of said first and second reflection type relief holograms comprises a computer generated hologram (CGH);

the resulting hologram comprises a set of pixels and interference gratings differing in grating surface spacing and inclination for each pixel which are recorded therein; and
the first reflection type relief hologram differs from the second reflection type relief hologram.

29. (currently amended): A method of fabricating a hologram-recorded medium from a photopolymer capable of recording a volume hologram, the method comprising:

stacking the photopolymer on a dichroic filter comprising a multilayer interference film, said dichroic filter being stacked on a first transmission type hologram,

striking reconstructing illumination light of given wavelength on a first side of said first transmission type hologram that is opposite a second side of said first transmission type hologram which is facing said photopolymer, so that first interference fringes produced by interference of light diffracted from said first transmission type hologram and reference light incident on said photopolymer are recorded in said photopolymer,

replacing said first transmission type hologram with a second transmission type hologram and striking reconstructing illumination light of the given wavelength on said second transmission type hologram through said photopolymer, so that second interference fringes produced by interference of light diffracted from said second transmission type hologram and the incident light are recorded in said photopolymer,

wherein each of said first and second transmission type holograms comprises a computer generated hologram (CGH);

the resulting hologram comprises a set of pixels and interference gratings differing in grating surface spacing and inclination for each pixel which are recorded therein; and
the first transmission type relief hologram differs from the second transmission type relief
hologram.

30.-63. (canceled).

64. (previously presented): The method of fabricating a hologram-recorded medium of claim 28, wherein the computer generated hologram is fabricated using an electron beam.

65. (previously presented): The method of fabricating a hologram-recorded medium of claim 28, wherein the dichroic filter is replaced with another dichroic filter when the first reflection type relief hologram is replaced with the second reflection type relief hologram.

66. (previously presented): The method of fabricating a hologram-recorded medium of claim 29, wherein the dichroic filter is replaced with another dichroic filter when the first transmission type hologram is replaced with the second transmission type hologram.